Remarks

Claims 1-43 are now pending in this application. Claims 1-28 are rejected. Claims 29-43 have been newly added. Claims 6-8, 11, 14, 20-22, 25, and 28 have been indicated to contain allowable subject matter. Applicant wishes to thank the Examiner for the indication of allowable subject matter in Claims 6-8, 11, 14, 20-22, 25, and 28.

In accordance with 37 C.F.R. 1.136(a), a three-month extension of time is submitted herewith to extend the due date of the response to the Office Action dated April 9, 2003 for the above-identified patent application from July 9, 2003 through and including October 9, 2003. In accordance with 37 C.F.R. 1.17(a)(3), authorization to charge a deposit account in the amount of $950.00 to cover this extension of time request also is submitted herewith. In addition, an authorization to charge the deposit account for the newly added claims has been submitted herewith.

The objection to the drawing, filed on February 4, 2003, is respectfully traversed. Applicant has amended the drawing to overcome the objection. Accordingly, Applicant respectfully requests that the objection to the drawing be withdrawn.

For the reasons set forth above, Applicant requests that the objection to the drawing be withdrawn.

The rejection of Claims 1-28 under 35 U.S.C. § 112, second paragraph, is respectfully traversed. Applicant has amended Claims 1 and 15 to provide relationships between elements in the claims and respectfully submits that one skilled in the art, after reading the specification in light of the figures, would understand the present application. Accordingly, Applicant respectfully submits that Claims 1-28 are definite and contain subject matter that is supported by the specification in such a way as to enable one skilled in the art to make and/or use the invention. Accordingly, Applicant respectfully requests that the rejection of Claims 1-28 under section 112, second paragraph, be withdrawn.

For the reasons set forth above, Applicant respectfully requests that the rejection of Claims 1-28 under section 112, second paragraph, be withdrawn.

The rejection of Claims 1-3 and 15-17 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,593,213 (Vesce et al.), in view of U.S. Patent No. 5,739,594 (Sheppard et al.) and U.S. Patent No. 5,497,332 (Allen et al.) is respectfully traversed.

Vesce et al. describe a switched mode power supply (100) and an associated holdup circuit (102) (column 2, lines 18-20). The switched mode power supply receives 28 volt direct current (28 VDC) primary input power on a line (104) (column 2, lines 19-23). The 28 VDC on the line (104) is provided to an anode of a diode (106) and an input voltage monitor circuit (164) (column 2, lines 22-24). Primary input current flows through the diode onto a 28 VDC power supply bus on a line (110) which is filtered by a capacitor (112) (column 2, lines 24-26). A main power transformer (122) receives primary input voltage on a line (120) and transforms that voltage to various levels on lines (124, 126, 128, 130) (column 2, lines 43-45).

Sheppard et al. describe a device for controlling the operation of an automatic transfer switch (ATS) (column 1, lines 5-8). ATS includes an actuator (16) that may have a solenoid or a linear motor provided with a mechanical linkage adapted to move a switching assembly (12) in a known manner (column 2, lines 49-51). Relays provide a means for energizing the actuator via a line (26) (column 3, lines 4-6). A relay/transformer box (20) provides a voltage proportional to a line voltage input on a line (27) to a controller (100) as well as a sensing voltage on a line (28) (column 3, lines 12-14). A relay control signal is provided from the controller on a line (30) to the relay/transformer box (column 3, lines 14-16). A display device (32) is connected to the controller to display the status of the ATS operation (column 3, lines 15-18).

Allen et al. describe a method and apparatus for transducing and monitoring the performance of generator units, which may be DC or AC generators, either single phase or polyphase, as well as for controlling the loads connected thereto (column 1, lines 6-12). The apparatus includes a monitor that uses an integrated embedded microprocessor and microcontroller (P&C) (22) on a single chip, such as Intel's chip MCS-96.TM. and, more specifically, the member of MCS-96 family designated as 80196KB, which has 68 pins, analog-and-digital I/O, a 16-bit CPU, register-to-register architecture, eight A/D input channels (10-bit conversion), pulse-width-modulation (PWM) outputs with programmable duty cycle for motor control and D/A conversion, five 8-pin I/O ports and one with alternate

function capability, and a full duplex serial communications port capable of implementing I/O port expansions (column 3, lines 34-46).

Claim 1 recites an automatic transfer switch controller comprising "at least one transformer to convert power from utility and generator power sources into power supply voltages for powering said controller and into voltages to be sensed by said controller; a power supply circuit to regulate and filter signals from said transformer; a solenoid driver circuit to drive automatic transfer switch solenoids that are configured to facilitate a supply of power from one of said utility and generator power sources; an embedded microcontroller configured to control logic functions and to monitor voltages from said utility and generator power sources; a voltage sense signal conditioning circuit for filtering signals provided to said microcontroller, wherein at least two of said microcontroller, solenoid driver circuit and voltage sense signal conditioning circuit are located on a control circuit board; a user interface operationally coupled to said microcontroller for operator entry of instructions; and at least one LED indicator interfaced to said microcontroller to indicate operator entry of instructions at said user interface."

None of Vesce et al., Sheppard et al., or Allen et al., considered alone or in combination, describe or suggest an automatic transfer switch controller including at least one transformer to convert power from utility and generator power sources into power supply voltages for powering the controller and into voltages to be sensed by the controller, a power supply circuit to regulate and filter signals from said transformer, a solenoid driver circuit to drive automatic transfer switch solenoids that are configured to facilitate a supply of power from one of the utility and generator power sources, an embedded microcontroller configured to control logic functions and to monitor voltages from said utility and generator power sources, a voltage sense signal conditioning circuit for filtering signals provided to the microcontroller, where at least two of the microcontroller, solenoid driver circuit and voltage sense signal conditioning circuit are located on a control circuit board, a user interface operationally coupled to said microcontroller for operator entry of instructions; and at least one LED indicator interfaced to the microcontroller to indicate operator entry of instructions at the user interface.

More specifically, none of Vesce et al., Sheppard et al., or Allen et al., considered alone or in combination, describe or suggest an automatic transfer switch controller including a voltage sense signal conditioning circuit for filtering signals provided

to the microcontroller, where at least two of the microcontroller, solenoid driver circuit and voltage sense signal conditioning circuit are located on a control circuit board. Rather, Vesce et al. describe the switched mode power supply that receives the 28 VDC primary input power, the capacitor that filters an output line from the diode receiving the 28 VDC primary input power, and the main power transformer that receives the primary input voltage and transforms that voltage to various levels. Sheppard et al. describe the actuator that may have a solenoid, the relays that provide a means for energizing the actuator, the relay/transformer box that provides a voltage to the controller, and the display device that is connected to the controller to display the status of the ATS operation. Allen et al. describe the member of MCS-96 family that has pulse-width-modulation outputs with programmable duty cycle for motor control. For the reasons set forth above, Claim 1 is submitted to be patentable over Vesce et al. in view of Sheppard et al. and Allen et al.

Claims 2-3 depend, directly or indirectly, from independent Claim 1. When the recitations of Claims 2-3 are considered in combination with the recitations of Claim 1, Applicant submits that dependent Claims 2-3 likewise are patentable over Vesce et al. in view of Sheppard et al. and Allen et al.

Claim 15 recites an automatic transfer switch system comprising "an input configured to be connected to a utility power source; an input configured to be connected to a generator power source; a transfer switch configured to switch a load from said utility power source to said generator power source and further configured to switch the load back to said utility power source; and an automatic transfer switch controller comprising: at least one transformer to convert power from utility and generator power sources into power supply voltages for powering said controller and into voltages to be sensed by said controller; a power supply circuit to regulate and filter signals from said transformer; a solenoid driver circuit to drive automatic transfer switch solenoids that are configured to facilitate a supply of power from one of said utility and generator power sources; an embedded microcontroller configured to control logic functions and to monitor voltages from said utility and generator power sources; a voltage sense signal conditioning circuit for filtering signals provided to said microcontroller, wherein at least two of said microcontroller, solenoid driver circuit and voltage sense signal conditioning circuit are located on a control circuit board; a user interface operationally coupled to said microcontroller for operator entry of instructions; and

at least one LED indicator interfaced to said microcontroller to indicate operator entry of instructions at said user interface."

None of Vesce et al., Sheppard et al., or Allen et al., considered alone or in combination, describe or suggest an automatic transfer switch system including an input configured to be connected to a utility power source, an input configured to be connected to a generator power source, a transfer switch configured to switch a load from the utility power source to the generator power source and further configured to switch the load back to the utility power source, and an automatic transfer switch controller including at least one transformer to convert power from utility and generator power sources into power supply voltages for powering the controller and into voltages to be sensed by the controller, a power supply circuit to regulate and filter signals from said transformer, a solenoid driver circuit to drive automatic transfer switch solenoids that are configured to facilitate a supply of power from one of the utility and generator power sources, an embedded microcontroller configured to control logic functions and to monitor voltages from said utility and generator power sources, a voltage sense signal conditioning circuit for filtering signals provided to the microcontroller, where at least two of the microcontroller, solenoid driver circuit and voltage sense signal conditioning circuit are located on a control circuit board, a user interface operationally coupled to the microcontroller for operator entry of instructions, and at least one LED indicator interfaced to the microcontroller to indicate operator entry of instructions at the user interface.

More specifically, none of Vesce et al., Sheppard et al., or Allen et al., considered alone or in combination, describe or suggest an automatic transfer switch system including a voltage sense signal conditioning circuit for filtering signals provided to the microcontroller, where at least two of the microcontroller, solenoid driver circuit and voltage sense signal conditioning circuit are located on a control circuit board. Rather, Vesce et al. describe the switched mode power supply that receives the 28 VDC primary input power, the capacitor that filters an output line from the diode receiving the 28 VDC primary input power, and the main power transformer that receives the primary input voltage and transforms that voltage to various levels. Sheppard et al. describe the actuator that may have a solenoid, the relays that provide a means for energizing the actuator, the relay/transformer box that provides a voltage to the controller, and the display device that is connected to the controller to display the status of the ATS operation. Allen et al. describe the member of

MCS-96 family that has pulse-width-modulation outputs with programmable duty cycle for motor control. For the reasons set forth above, Claim 15 is submitted to be patentable over Vesce et al. in view of Sheppard et al. and Allen et al.

Claims 16-17 depend, directly or indirectly, from independent Claim 15. When the recitations of Claims 16-17 are considered in combination with the recitations of Claim 15, Applicant submits that dependent Claims 16-17 likewise are patentable over Vesce et al. in view of Sheppard et al. and Allen et al.

For at least the reasons set forth above, Applicant respectfully requests that the Section 103 rejection of Claims 1-3 and 15-17 be withdrawn.

The rejection of Claims 4 and 18 under 35 U.S.C. § 103(a) as being unpatentable over Vesce et al. in view of Sheppard et al. and Allen et al. as applied to Claims 1 and 15, and further in view of U.S. Patent No. 6.181,028 (Kern et al.) is respectfully traversed.

Vesce et al., Sheppard et al. and Allen et al. are described above.

Kern et al. describe a transfer mechanism for transferring the supply of power between a utility source and a stand-by source (column 1, lines 6-10). The transfer mechanism includes circuit breakers (60, 62, 64, 66, and 68) that may be toggled between off-positions where corresponding power relays (77, 79 and 92) are isolated from a utility source (42) and on-positions where the corresponding power relays are protected from the potential overload by the utility source (column 5, lines 15-20).

Claim 4 depends on Claim 1 which recites an automatic transfer switch controller comprising "at least one transformer to convert power from utility and generator power sources into power supply voltages for powering said controller and into voltages to be sensed by said controller; a power supply circuit to regulate and filter signals from said transformer; a solenoid driver circuit to drive automatic transfer switch solenoids that are configured to facilitate a supply of power from one of said utility and generator power sources; an embedded microcontroller configured to control logic functions and to monitor voltages from said utility and generator power sources; a voltage sense signal conditioning circuit for filtering signals provided to said microcontroller, wherein at least two of said microcontroller, solenoid driver circuit and voltage sense signal conditioning circuit are

located on a control circuit board; a user interface operationally coupled to said microcontroller for operator entry of instructions; and at least one LED indicator interfaced to said microcontroller to indicate operator entry of instructions at said user interface."

None of Vesce et al., Sheppard et al., Allen et al., or Kern et al., considered alone or in combination, describe or suggest an automatic transfer switch controller including at least one transformer to convert power from utility and generator power sources into power supply voltages for powering the controller and into voltages to be sensed by the controller, a power supply circuit to regulate and filter signals from said transformer, a solenoid driver circuit to drive automatic transfer switch solenoids that are configured to facilitate a supply of power from one of the utility and generator power sources, an embedded microcontroller configured to control logic functions and to monitor voltages from said utility and generator power sources, a voltage sense signal conditioning circuit for filtering signals provided to the microcontroller, where at least two of the microcontroller, solenoid driver circuit and voltage sense signal conditioning circuit are located on a control circuit board, a user interface operationally coupled to said microcontroller for operator entry of instructions; and at least one LED indicator interfaced to the microcontroller to indicate operator entry of instructions at the user interface.

More specifically, none of Vesce et al., Sheppard et al., Allen et al., or Kern et al., considered alone or in combination, describe or suggest an automatic transfer switch controller including a voltage sense signal conditioning circuit for filtering signals provided to the microcontroller, where at least two of the microcontroller, solenoid driver circuit and voltage sense signal conditioning circuit are located on a control circuit board. Rather, Vesce et al. describe the switched mode power supply that receives the 28 VDC primary input power, the capacitor that filters an output line from the diode receiving the 28 VDC primary input power, and the main power transformer that receives the primary input voltage and transforms that voltage to various levels. Sheppard et al. describe the actuator that may have a solenoid, the relays that provide a means for energizing the actuator, the relay/transformer box that provides a voltage to the controller, and the display device that is connected to the controller to display the status of the ATS operation. Allen et al. describe the member of MCS-96 family that has pulse-width-modulation outputs with programmable duty cycle for motor control. Kern et al. describe circuit breakers that may be toggled to off-positions where the corresponding power relays are isolated from the utility source. For the reasons set

forth above, Claim 1 is submitted to be patentable over Vesce et al. in view of Sheppard et al. and Allen et al., and further in view of Kern et al.

When the recitations of Claim 4 are considered in combination with the recitations of Claim 1, Applicant submits that dependent Claim 4 likewise is patentable over Vesce et al. in view of Sheppard et al. and Allen et al., and further in view of Kern et al.

Claim 18 depends on Claim 15 which recites an automatic transfer switch system comprising "an input configured to be connected to a utility power source; an input configured to be connected to a generator power source; a transfer switch configured to switch a load from said utility power source to said generator power source and further configured to switch the load back to said utility power source; and an automatic transfer switch controller comprising: at least one transformer to convert power from utility and generator power sources into power supply voltages for powering said controller and into voltages to be sensed by said controller; a power supply circuit to regulate and filter signals from said transformer; a solenoid driver circuit to drive automatic transfer switch solenoids that are configured to facilitate a supply of power from one of said utility and generator power sources; an embedded microcontroller configured to control logic functions and to monitor voltages from said utility and generator power sources; a voltage sense signal conditioning circuit for filtering signals provided to said microcontroller, wherein at least two of said microcontroller, solenoid driver circuit and voltage sense signal conditioning circuit are located on a control circuit board; a user interface operationally coupled to said microcontroller for operator entry of instructions; and at least one LED indicator interfaced to said microcontroller to indicate operator entry of instructions at said user interface."

None of Vesce et al., Sheppard et al., Allen et al., or Kern et al., considered alone or in combination, describe or suggest an automatic transfer switch system including an input configured to be connected to a utility power source, an input configured to be connected to a generator power source, a transfer switch configured to switch a load from the utility power source to the generator power source and further configured to switch the load back to the utility power source, and an automatic transfer switch controller including at least one transformer to convert power from utility and generator power sources into power supply voltages for powering the controller and into voltages to be sensed by the controller, a power supply circuit to regulate and filter signals from said transformer, a solenoid driver circuit to drive automatic transfer switch solenoids that are configured to facilitate a supply of power

from one of the utility and generator power sources, an embedded microcontroller configured to control logic functions and to monitor voltages from said utility and generator power sources, a voltage sense signal conditioning circuit for filtering signals provided to the microcontroller, where at least two of the microcontroller, solenoid driver circuit and voltage sense signal conditioning circuit are located on a control circuit board, a user interface operationally coupled to the microcontroller for operator entry of instructions, and at least one LED indicator interfaced to the microcontroller to indicate operator entry of instructions at the user interface.

More specifically, none of Vesce et al., Sheppard et al., Allen et al., or Kern et al., considered alone or in combination, describe or suggest an automatic transfer switch system including a voltage sense signal conditioning circuit for filtering signals provided to the microcontroller, where at least two of the microcontroller, solenoid driver circuit and voltage sense signal conditioning circuit are located on a control circuit board. Rather, Vesce et al. describe the switched mode power supply that receives the 28 VDC primary input power, the capacitor that filters an output line from the diode receiving the 28 VDC primary input power, and the main power transformer that receives the primary input voltage and transforms that voltage to various levels. Sheppard et al. describe the actuator that may have a solenoid, the relays that provide a means for energizing the actuator, the relay/transformer box that provides a voltage to the controller, and the display device that is connected to the controller to display the status of the ATS operation. Allen et al. describe the member of MCS-96 family that has pulse-width-modulation outputs with programmable duty cycle for motor control. Kern et al. describe circuit breakers that may be toggled to off-positions where the corresponding power relays are isolated from the utility source. For the reasons set forth above, Claim 15 is submitted to be patentable over Vesce et al. in view of Sheppard et al. and Allen et al., and further in view of Kern et al.

When the recitations of Claim 18 are considered in combination with the recitations of Claim 15, Applicant submits that dependent Claim 18 likewise is patentable over Vesce et al. in view of Sheppard et al. and Allen et al., and further in view of Kern et al.

For at least the reasons set forth above, Applicant respectfully requests that the Section 103 rejection of Claims 4 and 18 be withdrawn.

The rejection of Claims 5 and 19 under 35 U.S.C. § 103(a) as being unpatentable over Vesce et al. in view of Sheppard et al. and Allen et al. as applied to Claims 1 and 15, and further in view of U.S. Patent No. 5,703,748 (Fulks et al.) is respectfully traversed.

Vesce et al., Sheppard et al. and Allen et al. are described above.

Fulks et al. describe a circuit that is suitable for use in driving a solenoid in a motor vehicle system environment and that may be used with solenoids included in controllable suspension and/or brake systems (column 3, lines 28-33). The circuit receives power from a vehicle power supply through a line (38), which is coupled through a diode (40), a resistor (56), a capacitor (58) and a diode (60) to a voltage regulator circuit (62) (column 3, lines 33-37).

Claim 5 depends on Claim 1 which recites an automatic transfer switch controller comprising "at least one transformer to convert power from utility and generator power sources into power supply voltages for powering said controller and into voltages to be sensed by said controller; a power supply circuit to regulate and filter signals from said transformer; a solenoid driver circuit to drive automatic transfer switch solenoids that are configured to facilitate a supply of power from one of said utility and generator power sources; an embedded microcontroller configured to control logic functions and to monitor voltages from said utility and generator power sources; a voltage sense signal conditioning circuit for filtering signals provided to said microcontroller, wherein at least two of said microcontroller, solenoid driver circuit and voltage sense signal conditioning circuit are located on a control circuit board; a user interface operationally coupled to said microcontroller for operator entry of instructions; and at least one LED indicator interfaced to said microcontroller to indicate operator entry of instructions at said user interface."

None of Vesce et al., Sheppard et al., Allen et al., or Fulks et al., considered alone or in combination, describe or suggest an automatic transfer switch controller including at least one transformer to convert power from utility and generator power sources into power supply voltages for powering the controller and into voltages to be sensed by the controller, a power supply circuit to regulate and filter signals from said transformer, a solenoid driver circuit to drive automatic transfer switch solenoids that are configured to facilitate a supply of power from one of the utility and generator power sources, an embedded microcontroller

configured to control logic functions and to monitor voltages from said utility and generator power sources, a voltage sense signal conditioning circuit for filtering signals provided to the microcontroller, where at least two of the microcontroller, solenoid driver circuit and voltage sense signal conditioning circuit are located on a control circuit board, a user interface operationally coupled to said microcontroller for operator entry of instructions; and at least one LED indicator interfaced to the microcontroller to indicate operator entry of instructions at the user interface.

More specifically, none of Vesce et al., Sheppard et al., Allen et al., or Fulks et al., considered alone or in combination, describe or suggest an automatic transfer switch controller including a voltage sense signal conditioning circuit for filtering signals provided to the microcontroller, where at least two of the microcontroller, solenoid driver circuit and voltage sense signal conditioning circuit are located on a control circuit board. Rather, Vesce et al. describe the switched mode power supply that receives the 28 VDC primary input power, the capacitor that filters an output line from the diode receiving the 28 VDC primary input power, and the main power transformer that receives the primary input voltage and transforms that voltage to various levels. Sheppard et al. describe the actuator that may have a solenoid, the relays that provide a means for energizing the actuator, the relay/transformer box that provides a voltage to the controller, and the display device that is connected to the controller to display the status of the ATS operation. Allen et al. describe the member of MCS-96 family that has pulse-width-modulation outputs with programmable duty cycle for motor control. Fulks et al. describe a circuit that is suitable for use in driving a solenoid and that receives power through a line, which is coupled through a diode. For the reasons set forth above, Claim 1 is submitted to be patentable over Vesce et al. in view of Sheppard et al. and Allen et al., and further in view of Fulks et al.

When the recitations of Claim 5 are considered in combination with the recitations of Claim 1, Applicant submits that dependent Claim 5 likewise is patentable over Vesce et al. in view of Sheppard et al. and Allen et al., and further in view of Fulks et al.

Claim 19 depends on Claim 15 which recites an automatic transfer switch system comprising "an input configured to be connected to a utility power source; an input configured to be connected to a generator power source; a transfer switch configured to switch a load from said utility power source to said generator power source and further configured to switch the load back to said utility power source; and an automatic transfer

switch controller comprising: at least one transformer to convert power from utility and generator power sources into power supply voltages for powering said controller and into voltages to be sensed by said controller; a power supply circuit to regulate and filter signals from said transformer; a solenoid driver circuit to drive automatic transfer switch solenoids that are configured to facilitate a supply of power from one of said utility and generator power sources; an embedded microcontroller configured to control logic functions and to monitor voltages from said utility and generator power sources; a voltage sense signal conditioning circuit for filtering signals provided to said microcontroller, wherein at least two of said microcontroller, solenoid driver circuit and voltage sense signal conditioning circuit are located on a control circuit board; a user interface operationally coupled to said microcontroller for operator entry of instructions; and at least one LED indicator interfaced to said microcontroller to indicate operator entry of instructions at said user interface."

None of Vesce et al., Sheppard et al., Allen et al., or Fulks et al., considered alone or in combination, describe or suggest an automatic transfer switch system including an input configured to be connected to a utility power source, an input configured to be connected to a generator power source, a transfer switch configured to switch a load from the utility power source to the generator power source and further configured to switch the load back to the utility power source, and an automatic transfer switch controller including at least one transformer to convert power from utility and generator power sources into power supply voltages for powering the controller and into voltages to be sensed by the controller, a power supply circuit to regulate and filter signals from said transformer, a solenoid driver circuit to drive automatic transfer switch solenoids that are configured to facilitate a supply of power from one of the utility and generator power sources, an embedded microcontroller configured to control logic functions and to monitor voltages from said utility and generator power sources, a voltage sense signal conditioning circuit for filtering signals provided to the microcontroller, where at least two of the microcontroller, solenoid driver circuit and voltage sense signal conditioning circuit are located on a control circuit board, a user interface operationally coupled to the microcontroller for operator entry of instructions, and at least one LED indicator interfaced to the microcontroller to indicate operator entry of instructions at the user interface.

More specifically, none of Vesce et al., Sheppard et al., Allen et al., or Fulks et al., considered alone or in combination, describe or suggest an automatic transfer switch

system including a voltage sense signal conditioning circuit for filtering signals provided to the microcontroller, where at least two of the microcontroller, solenoid driver circuit and voltage sense signal conditioning circuit are located on a control circuit board. Rather, Vesce et al. describe the switched mode power supply that receives the 28 VDC primary input power, the capacitor that filters an output line from the diode receiving the 28 VDC primary input power, and the main power transformer that receives the primary input voltage and transforms that voltage to various levels. Sheppard et al. describe the actuator that may have a solenoid, the relays that provide a means for energizing the actuator, the relay/transformer box that provides a voltage to the controller, and the display device that is connected to the controller to display the status of the ATS operation. Allen et al. describe the member of MCS-96 family that has pulse-width-modulation outputs with programmable duty cycle for motor control. Fulks et al. describe a circuit that is suitable for use in driving a solenoid and that receives power through a line, which is coupled through a diode. For the reasons set forth above, Claim 15 is submitted to be patentable over Vesce et al. in view of Sheppard et al. and Allen et al., and further in view of Fulks et al.

When the recitations of Claim 19 are considered in combination with the recitations of Claim 15, Applicant submits that dependent Claim 19 likewise is patentable over Vesce et al. in view of Sheppard et al. and Allen et al., and further in view of Fulks et al.

For at least the reasons set forth above, Applicant respectfully requests that the Section 103 rejection of Claims 5 and 19 be withdrawn.

The rejection of Claims 9-10 and 23-24 under 35 U.S.C. § 103(a) as being unpatentable over Vesce et al. in view of Sheppard et al. and Allen et al. as applied to Claims 1 and 15, and further in view of Generac® Power Systems, Inc., "E" Control Panel Brochure is respectfully traversed.

Vesce et al., Sheppard et al. and Allen et al. are described above.

Generac® Power Systems, Inc., "E" Control Panel Brochure describes an "E" control panel that provides advanced monitoring and communications at a more economical cost than a fully digital control panel (front page). The "E" control panel monitors oil pressure, oil temperature, and fuel level.

Claims 9-10 depend, directly or indirectly, on Claim 1 which recites an automatic transfer switch controller comprising "at least one transformer to convert power from utility and generator power sources into power supply voltages for powering said controller and into voltages to be sensed by said controller; a power supply circuit to regulate and filter signals from said transformer; a solenoid driver circuit to drive automatic transfer switch solenoids that are configured to facilitate a supply of power from one of said utility and generator power sources; an embedded microcontroller configured to control logic functions and to monitor voltages from said utility and generator power sources; a voltage sense signal conditioning circuit for filtering signals provided to said microcontroller, wherein at least two of said microcontroller, solenoid driver circuit and voltage sense signal conditioning circuit are located on a control circuit board; a user interface operationally coupled to said microcontroller for operator entry of instructions; and at least one LED indicator interfaced to said microcontroller to indicate operator entry of instructions at said user interface."

None of Vesce et al., Sheppard et al., Allen et al., or Generac® Power Systems, Inc., "E" Control Panel Brochure, considered alone or in combination, describe or suggest an automatic transfer switch controller including at least one transformer to convert power from utility and generator power sources into power supply voltages for powering the controller and into voltages to be sensed by the controller, a power supply circuit to regulate and filter signals from said transformer, a solenoid driver circuit to drive automatic transfer switch solenoids that are configured to facilitate a supply of power from one of the utility and generator power sources, an embedded microcontroller configured to control logic functions and to monitor voltages from said utility and generator power sources, a voltage sense signal conditioning circuit for filtering signals provided to the microcontroller, where at least two of the microcontroller, solenoid driver circuit and voltage sense signal conditioning circuit are located on a control circuit board, a user interface operationally coupled to said microcontroller for operator entry of instructions; and at least one LED indicator interfaced to the microcontroller to indicate operator entry of instructions at the user interface.

More specifically, none of Vesce et al., Sheppard et al., Allen et al., or Generac® Power Systems, Inc., "E" Control Panel Brochure, considered alone or in combination, describe or suggest an automatic transfer switch controller including a voltage

sense signal conditioning circuit for filtering signals provided to the microcontroller, where at least two of the microcontroller, solenoid driver circuit and voltage sense signal conditioning circuit are located on a control circuit board. Rather, Vesce et al. describe the switched mode power supply that receives the 28 VDC primary input power, the capacitor that filters an output line from the diode receiving the 28 VDC primary input power, and the main power transformer that receives the primary input voltage and transforms that voltage to various levels. Sheppard et al. describe the actuator that may have a solenoid, the relays that provide a means for energizing the actuator, the relay/transformer box that provides a voltage to the controller, and the display device that is connected to the controller to display the status of the ATS operation. Allen et al. describe the member of MCS-96 family that has pulse-width-modulation outputs with programmable duty cycle for motor control. Generac® Power Systems, Inc., "E" Control Panel Brochure describes the "E" control panel that monitors oil pressure, oil temperature, and fuel level. For the reasons set forth above, Claim 1 is submitted to be patentable over Vesce et al. in view of Sheppard et al. and Allen et al., and further in view of Generac® Power Systems, Inc., "E" Control Panel Brochure.

When the recitations of Claims 9-10 are considered in combination with the recitations of Claim 1, Applicant submits that dependent Claims 9-10 likewise is patentable over Vesce et al. in view of Sheppard et al. and Allen et al., and further in view of Generac® Power Systems, Inc., "E" Control Panel Brochure.

Claims 23-24 depend, directly or indirectly, on Claim 15 which recites an automatic transfer switch system comprising "an input configured to be connected to a utility power source; an input configured to be connected to a generator power source; a transfer switch configured to switch a load from said utility power source to said generator power source and further configured to switch the load back to said utility power source; and an automatic transfer switch controller comprising: at least one transformer to convert power from utility and generator power sources into power supply voltages for powering said controller and into voltages to be sensed by said controller; a power supply circuit to regulate and filter signals from said transformer; a solenoid driver circuit to drive automatic transfer switch solenoids that are configured to facilitate a supply of power from one of said utility and generator power sources; an embedded microcontroller configured to control logic functions and to monitor voltages from said utility and generator power sources; a voltage sense signal conditioning circuit for filtering signals provided to said microcontroller,

wherein at least two of said microcontroller, solenoid driver circuit and voltage sense signal conditioning circuit are located on a control circuit board; a user interface operationally coupled to said microcontroller for operator entry of instructions; and at least one LED indicator interfaced to said microcontroller to indicate operator entry of instructions at said user interface."

None of Vesce et al., Sheppard et al., Allen et al., or Generac® Power Systems, Inc., "E" Control Panel Brochure, considered alone or in combination, describe or suggest an automatic transfer switch system including an input configured to be connected to a utility power source, an input configured to be connected to a generator power source, a transfer switch configured to switch a load from the utility power source to the generator power source and further configured to switch the load back to the utility power source, and an automatic transfer switch controller including at least one transformer to convert power from utility and generator power sources into power supply voltages for powering the controller and into voltages to be sensed by the controller, a power supply circuit to regulate and filter signals from said transformer, a solenoid driver circuit to drive automatic transfer switch solenoids that are configured to facilitate a supply of power from one of the utility and generator power sources, an embedded microcontroller configured to control logic functions and to monitor voltages from said utility and generator power sources, a voltage sense signal conditioning circuit for filtering signals provided to the microcontroller, where at least two of the microcontroller, solenoid driver circuit and voltage sense signal conditioning circuit are located on a control circuit board, a user interface operationally coupled to the microcontroller for operator entry of instructions, and at least one LED indicator interfaced to the microcontroller to indicate operator entry of instructions at the user interface.

More specifically, none of Vesce et al., Sheppard et al., Allen et al., or Generac® Power Systems, Inc., "E" Control Panel Brochure, considered alone or in combination, describe or suggest an automatic transfer switch system including a voltage sense signal conditioning circuit for filtering signals provided to the microcontroller, where at least two of the microcontroller, solenoid driver circuit and voltage sense signal conditioning circuit are located on a control circuit board. Rather, Vesce et al. describe the switched mode power supply that receives the 28 VDC primary input power, the capacitor that filters an output line from the diode receiving the 28 VDC primary input power, and the main power transformer that receives the primary input voltage and transforms that voltage to various

levels. Sheppard et al. describe the actuator that may have a solenoid, the relays that provide a means for energizing the actuator, the relay/transformer box that provides a voltage to the controller, and the display device that is connected to the controller to display the status of the ATS operation. Allen et al. describe the member of MCS-96 family that has pulse-width-modulation outputs with programmable duty cycle for motor control. Generac® Power Systems, Inc., "E" Control Panel Brochure describes the "E" control panel that monitors oil pressure, oil temperature, and fuel level. For the reasons set forth above, Claim 15 is submitted to be patentable over Vesce et al. in view of Sheppard et al. and Allen et al., and further in view of Generac® Power Systems, Inc., "E" Control Panel Brochure.

When the recitations of Claims 23-24 are considered in combination with the recitations of Claim 15, Applicant submits that dependent Claims 23-24 likewise are patentable over Vesce et al. in view of Sheppard et al. and Allen et al., and further in view of Generac® Power Systems, Inc., "E" Control Panel Brochure.

For at least the reasons set forth above, Applicant respectfully requests that the Section 103 rejection of Claims 9-10 and 23-24 be withdrawn.

The rejection of Claims 12 and 26 under 35 U.S.C. § 103(a) as being unpatentable over Vesce et al. in view of Sheppard et al. and Allen et al. as applied to Claims 1 and 15, and further in view further in view of U.S. Patent No. 5,920,129 (Smith) is respectfully traversed.

Vesce et al., Sheppard et al. and Allen et al. are described above.

Smith describes an alternate power source that may take the form of, for example, a generator driven by an internal combustion engine (column 1, lines 17-19). When a transformation from a commercial power source to the alternate source is required, a transfer switch is used to disconnect the commercial power source and thereafter to connect the alternate power source to the load (column 1, lines 18-23). The transfer switch conventionally provides an open, or break-before-make, transition between the two power sources (column 1, lines 22-25).

Claim 12 depends on Claim 1 which recites an automatic transfer switch controller comprising "at least one transformer to convert power from utility and generator power sources into power supply voltages for powering said controller and into voltages to be sensed by said controller; a power supply circuit to regulate and filter signals from said transformer; a solenoid driver circuit to drive automatic transfer switch solenoids that are configured to facilitate a supply of power from one of said utility and generator power sources; an embedded microcontroller configured to control logic functions and to monitor voltages from said utility and generator power sources; a voltage sense signal conditioning circuit for filtering signals provided to said microcontroller, wherein at least two of said microcontroller, solenoid driver circuit and voltage sense signal conditioning circuit are located on a control circuit board; a user interface operationally coupled to said microcontroller for operator entry of instructions; and at least one LED indicator interfaced to said microcontroller to indicate operator entry of instructions at said user interface."

None of Vesce et al., Sheppard et al., Allen et al., or Smith, considered alone or in combination, describe or suggest an automatic transfer switch controller including at least one transformer to convert power from utility and generator power sources into power supply voltages for powering the controller and into voltages to be sensed by the controller, a power supply circuit to regulate and filter signals from said transformer, a solenoid driver circuit to drive automatic transfer switch solenoids that are configured to facilitate a supply of power from one of the utility and generator power sources, an embedded microcontroller configured to control logic functions and to monitor voltages from said utility and generator power sources, a voltage sense signal conditioning circuit for filtering signals provided to the microcontroller, where at least two of the microcontroller, solenoid driver circuit and voltage sense signal conditioning circuit are located on a control circuit board, a user interface operationally coupled to said microcontroller for operator entry of instructions; and at least one LED indicator interfaced to the microcontroller to indicate operator entry of instructions at the user interface.

More specifically, none of Vesce et al., Sheppard et al., Allen et al., Smith, considered alone or in combination, describe or suggest an automatic transfer switch controller including a voltage sense signal conditioning circuit for filtering signals provided to the microcontroller, where at least two of the microcontroller, solenoid driver circuit and voltage sense signal conditioning circuit are located on a control circuit board. Rather, Vesce

et al. describe the switched mode power supply that receives the 28 VDC primary input power, the capacitor that filters an output line from the diode receiving the 28 VDC primary input power, and the main power transformer that receives the primary input voltage and transforms that voltage to various levels. Sheppard et al. describe the actuator that may have a solenoid, the relays that provide a means for energizing the actuator, the relay/transformer box that provides a voltage to the controller, and the display device that is connected to the controller to display the status of the ATS operation. Allen et al. describe the member of MCS-96 family that has pulse-width-modulation outputs with programmable duty cycle for motor control. Smith describes that the transfer switch conventionally provides an open, or break-before-make, transition between the two power sources. For the reasons set forth above, Claim 1 is submitted to be patentable over Vesce et al. in view of Sheppard et al. and Allen et al., and further in view of Smith.

When the recitations of Claim 12 are considered in combination with the recitations of Claim 1, Applicant submits that dependent Claim 12 likewise is patentable over Vesce et al. in view of Sheppard et al. and Allen et al., and further in view of Smith.

Claim 26 depends on Claim 15 which recites an automatic transfer switch system comprising "an input configured to be connected to a utility power source; an input configured to be connected to a generator power source; a transfer switch configured to switch a load from said utility power source to said generator power source and further configured to switch the load back to said utility power source; and an automatic transfer switch controller comprising: at least one transformer to convert power from utility and generator power sources into power supply voltages for powering said controller and into voltages to be sensed by said controller; a power supply circuit to regulate and filter signals from said transformer; a solenoid driver circuit to drive automatic transfer switch solenoids that are configured to facilitate a supply of power from one of said utility and generator power sources; an embedded microcontroller configured to control logic functions and to monitor voltages from said utility and generator power sources; a voltage sense signal conditioning circuit for filtering signals provided to said microcontroller, wherein at least two of said microcontroller, solenoid driver circuit and voltage sense signal conditioning circuit are located on a control circuit board; a user interface operationally coupled to said microcontroller for operator entry of instructions; and at least one LED indicator interfaced to said microcontroller to indicate operator entry of instructions at said user interface."

None of Vesce et al., Sheppard et al., Allen et al., Smith, considered alone or in combination, describe or suggest an automatic transfer switch system including an input configured to be connected to a utility power source, an input configured to be connected to a generator power source, a transfer switch configured to switch a load from the utility power source to the generator power source and further configured to switch the load back to the utility power source, and an automatic transfer switch controller including at least one transformer to convert power from utility and generator power sources into power supply voltages for powering the controller and into voltages to be sensed by the controller, a power supply circuit to regulate and filter signals from said transformer, a solenoid driver circuit to drive automatic transfer switch solenoids that are configured to facilitate a supply of power from one of the utility and generator power sources, an embedded microcontroller configured to control logic functions and to monitor voltages from said utility and generator power sources, a voltage sense signal conditioning circuit for filtering signals provided to the microcontroller, where at least two of the microcontroller, solenoid driver circuit and voltage sense signal conditioning circuit are located on a control circuit board, a user interface operationally coupled to the microcontroller for operator entry of instructions, and at least one LED indicator interfaced to the microcontroller to indicate operator entry of instructions at the user interface.

More specifically, none of Vesce et al., Sheppard et al., Allen et al., or Smith, considered alone or in combination, describe or suggest an automatic transfer switch system including a voltage sense signal conditioning circuit for filtering signals provided to the microcontroller, where at least two of the microcontroller, solenoid driver circuit and voltage sense signal conditioning circuit are located on a control circuit board. Rather, Vesce et al. describe the switched mode power supply that receives the 28 VDC primary input power, the capacitor that filters an output line from the diode receiving the 28 VDC primary input power, and the main power transformer that receives the primary input voltage and transforms that voltage to various levels. Sheppard et al. describe the actuator that may have a solenoid, the relays that provide a means for energizing the actuator, the relay/transformer box that provides a voltage to the controller, and the display device that is connected to the controller to display the status of the ATS operation. Allen et al. describe the member of MCS-96 family that has pulse-width-modulation outputs with programmable duty cycle for motor control. Smith describes that the transfer switch conventionally provides an open, or break-before-make, transition between the two power sources. For the reasons set forth

above, Claim 15 is submitted to be patentable over Vesce et al. in view of Sheppard et al. and Allen et al., and further in view of Smith.

When the recitations of Claim 26 are considered in combination with the recitations of Claim 15, Applicant submits that dependent Claim 26 likewise is patentable over Vesce et al. in view of Sheppard et al. and Allen et al., and further in view of Smith.

For at least the reasons set forth above, Applicant respectfully requests that the Section 103 rejection of Claims 12 and 26 be withdrawn.

The rejection of Claims 13 and 27 under 35 U.S.C. § 103(a) as being unpatentable over Vesce et al. in view of Sheppard et al. and Allen et al. as applied to Claims 1 and 15, and further in view further in view of Murphy® Generator Control Panel MGC900 Series Brochure is respectfully traversed.

Vesce et al., Sheppard et al. and Allen et al. are described above.

Murphy® Generator Control Panel MGC900 Series Brochure describes MCG900 series generator panels that provide economical, engine/generator, manual or automatic start/stop control for applications required by NFPA-110 approvals (front page). The MCG 900 series generator panels include a cycle crank time and provide crank/rest timing (front page).

Claim 13 depends on Claim 1 which recites an automatic transfer switch controller comprising "at least one transformer to convert power from utility and generator power sources into power supply voltages for powering said controller and into voltages to be sensed by said controller; a power supply circuit to regulate and filter signals from said transformer; a solenoid driver circuit to drive automatic transfer switch solenoids that are configured to facilitate a supply of power from one of said utility and generator power sources; an embedded microcontroller configured to control logic functions and to monitor voltages from said utility and generator power sources; a voltage sense signal conditioning circuit for filtering signals provided to said microcontroller, wherein at least two of said microcontroller, solenoid driver circuit and voltage sense signal conditioning circuit are located on a control circuit board; a user interface operationally coupled to said

microcontroller for operator entry of instructions; and at least one LED indicator interfaced to said microcontroller to indicate operator entry of instructions at said user interface."

None of Vesce et al., Sheppard et al., Allen et al., or Murphy® Generator Control Panel MGC900 Series Brochure, considered alone or in combination, describe or suggest an automatic transfer switch controller including at least one transformer to convert power from utility and generator power sources into power supply voltages for powering the controller and into voltages to be sensed by the controller, a power supply circuit to regulate and filter signals from said transformer, a solenoid driver circuit to drive automatic transfer switch solenoids that are configured to facilitate a supply of power from one of the utility and generator power sources, an embedded microcontroller configured to control logic functions and to monitor voltages from said utility and generator power sources, a voltage sense signal conditioning circuit for filtering signals provided to the microcontroller, where at least two of the microcontroller, solenoid driver circuit and voltage sense signal conditioning circuit are located on a control circuit board, a user interface operationally coupled to said microcontroller for operator entry of instructions; and at least one LED indicator interfaced to the microcontroller to indicate operator entry of instructions at the user interface.

More specifically, none of Vesce et al., Sheppard et al., Allen et al., Murphy® Generator Control Panel MGC900 Series Brochure, considered alone or in combination, describe or suggest an automatic transfer switch controller including a voltage sense signal conditioning circuit for filtering signals provided to the microcontroller, where at least two of the microcontroller, solenoid driver circuit and voltage sense signal conditioning circuit are located on a control circuit board. Rather, Vesce et al. describe the switched mode power supply that receives the 28 VDC primary input power, the capacitor that filters an output line from the diode receiving the 28 VDC primary input power, and the main power transformer that receives the primary input voltage and transforms that voltage to various levels. Sheppard et al. describe the actuator that may have a solenoid, the relays that provide a means for energizing the actuator, the relay/transformer box that provides a voltage to the controller, and the display device that is connected to the controller to display the status of the ATS operation. Allen et al. describe the member of MCS-96 family that has pulse-width-modulation outputs with programmable duty cycle for motor control. Murphy® Generator Control Panel MGC900 Series Brochure describes that the MCG 900 series generator panels include a cycle crank time and provide crank/rest timing. For the reasons set

forth above, Claim 1 is submitted to be patentable over Vesce et al. in view of Sheppard et al. and Allen et al., and further in view of Murphy® Generator Control Panel MGC900 Series Brochure.

When the recitations of Claim 13 are considered in combination with the recitations of Claim 1, Applicant submits that dependent Claim 13 likewise is patentable over Vesce et al. in view of Sheppard et al. and Allen et al., and further in view of Murphy® Generator Control Panel MGC900 Series Brochure.

Claims 27 depends on Claim 15 which recites an automatic transfer switch system comprising "an input configured to be connected to a utility power source; an input configured to be connected to a generator power source; a transfer switch configured to switch a load from said utility power source to said generator power source and further configured to switch the load back to said utility power source; and an automatic transfer switch controller comprising: at least one transformer to convert power from utility and generator power sources into power supply voltages for powering said controller and into voltages to be sensed by said controller; a power supply circuit to regulate and filter signals from said transformer; a solenoid driver circuit to drive automatic transfer switch solenoids that are configured to facilitate a supply of power from one of said utility and generator power sources; an embedded microcontroller configured to control logic functions and to monitor voltages from said utility and generator power sources; a voltage sense signal conditioning circuit for filtering signals provided to said microcontroller, wherein at least two of said microcontroller, solenoid driver circuit and voltage sense signal conditioning circuit are located on a control circuit board; a user interface operationally coupled to said microcontroller for operator entry of instructions; and at least one LED indicator interfaced to said microcontroller to indicate operator entry of instructions at said user interface."

None of Vesce et al., Sheppard et al., Allen et al., Murphy® Generator Control Panel MGC900 Series Brochure, considered alone or in combination, describe or suggest an automatic transfer switch system including an input configured to be connected to a utility power source, an input configured to be connected to a generator power source, a transfer switch configured to switch a load from the utility power source to the generator power source and further configured to switch the load back to the utility power source, and an automatic transfer switch controller including at least one transformer to convert power

from utility and generator power sources into power supply voltages for powering the controller and into voltages to be sensed by the controller, a power supply circuit to regulate and filter signals from said transformer, a solenoid driver circuit to drive automatic transfer switch solenoids that are configured to facilitate a supply of power from one of the utility and generator power sources, an embedded microcontroller configured to control logic functions and to monitor voltages from said utility and generator power sources, a voltage sense signal conditioning circuit for filtering signals provided to the microcontroller, where at least two of the microcontroller, solenoid driver circuit and voltage sense signal conditioning circuit are located on a control circuit board, a user interface operationally coupled to the microcontroller for operator entry of instructions, and at least one LED indicator interfaced to the microcontroller to indicate operator entry of instructions at the user interface.

More specifically, none of Vesce et al., Sheppard et al., Allen et al., or Murphy® Generator Control Panel MGC900 Series Brochure, considered alone or in combination, describe or suggest an automatic transfer switch system including a voltage sense signal conditioning circuit for filtering signals provided to the microcontroller, where at least two of the microcontroller, solenoid driver circuit and voltage sense signal conditioning circuit are located on a control circuit board. Rather, Vesce et al. describe the switched mode power supply that receives the 28 VDC primary input power, the capacitor that filters an output line from the diode receiving the 28 VDC primary input power, and the main power transformer that receives the primary input voltage and transforms that voltage to various levels. Sheppard et al. describe the actuator that may have a solenoid, the relays that provide a means for energizing the actuator, the relay/transformer box that provides a voltage to the controller, and the display device that is connected to the controller to display the status of the ATS operation. Allen et al. describe the member of MCS-96 family that has pulse-width-modulation outputs with programmable duty cycle for motor control. Murphy® Generator Control Panel MGC900 Series Brochure describes that the MCG 900 series generator panels include a cycle crank time and provide crank/rest timing. For the reasons set forth above, Claim 15 is submitted to be patentable over Vesce et al. in view of Sheppard et al. and Allen et al., and further in view of Murphy® Generator Control Panel MGC900 Series Brochure.

When the recitations of Claim 27 are considered in combination with the recitations of Claim 15, Applicant submits that dependent Claim 27 likewise is patentable

over Vesce et al. in view of Sheppard et al. and Allen et al., and further in view of Murphy® Generator Control Panel MGC900 Series Brochure.

For at least the reasons set forth above, Applicant respectfully requests that the Section 103 rejection of Claims 13 and 27 be withdrawn.

Moreover, Applicant respectfully submits that it is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the cited art so that the claimed invention is rendered obvious. Specifically, one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the art to deprecate the claimed invention. Further, it is impermissible to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art. The present Section 103 rejections are based on a combination of teachings selected from multiple patents in an attempt to arrive at the claimed invention. Specifically, Vesce et al. teaches that the switched mode power supply receives the 28 VDC primary input power, the capacitor filters an output line from the diode receiving the 28 VDC primary input power, and the main power transformer receives the primary input voltage and transforms that voltage to various levels. Sheppard et al. teaches that the actuator may have a solenoid, the relays provide a means for energizing the actuator, the relay/transformer box provides a voltage to the controller, and the display device is connected to the controller to display the status of the ATS operation. Allen et al. teaches that the member of MCS-96 family has pulse-width-modulation outputs with programmable duty cycle for motor control. Kern et al. teaches that circuit breakers may be toggled to off-positions where the corresponding power relays are isolated from the utility source. Fulks et al. teaches that a circuit is suitable for use in driving a solenoid and receives power through a line, which is coupled through a diode. Generac® Power Systems, Inc., "E" Control Panel Brochure teaches that the "E" control panel monitors oil pressure, oil temperature, and fuel level. Smith teaches that the transfer switch conventionally provides an open, or break-before-make, transition between the two power sources. Murphy® Generator Control Panel MGC900 Series Brochure teaches that the MCG 900 series generator panels include a cycle crank time and provide crank/rest timing. Since there is no teaching nor suggestion in the cited art for the combination, the Section 103 rejections appear to be based on a hindsight reconstruction in which isolated disclosures have been picked and chosen in an attempt to deprecate the present

invention. Of course, such combinations are impermissible, and for this reason alone, Applicant requests that the Section 103 rejections of rejections of Claims 1-3 and 15-17, Claims 4 and 18, Claims 5 and 19, Claims 9-10 and 23-24, Claims 12 and 26, and Claims 13 and 27 be withdrawn.

For at least the reasons set forth above, Applicant respectfully requests that the Section 103 rejections of Claims 1-3 and 15-17, Claims 4 and 18, Claims 5 and 19, Claims 9-10 and 23-24, Claims 12 and 26, and Claims 13 and 27 be withdrawn.

Newly added Claim 29 recites a controller. The references cited in the Office Action do not describe or suggest a controller as recited in Claim 29. Accordingly, Applicant respectfully submits that Claim 29 is patentable over the cited art.

Newly added Claims 30-37 depend, directly or indirectly, from independent Claim 29, which is submitted to be in condition for allowance and patentable over the cited art. For at least the reasons set forth above, Applicant respectfully submits that Claims 30-37 are also patentable over the cited art.

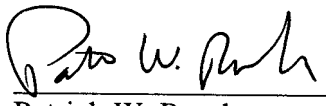
Newly added Claim 38 recites a controller. The reference cited in the Office Action does not describe or suggest a controller as recited in Claim 38. Accordingly, Applicant respectfully submits that Claim 38 is patentable over the cited art.

Newly added Claims 39-41 depend from independent Claim 38, which is submitted to be in condition for allowance and patentable over the cited art. For at least the reasons set forth above, Applicant respectfully submits that Claims 39-41 are also patentable over the cited art.

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

In view of the foregoing amendment and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,



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